

groups and determine if and how risky Internet behavior is being generated in such groups.

9. Many youth are still not telling parents/guardians and authorities when victimized.

One reason people may not understand the extent of offensive experiences youth encounter online is many youth do not disclose their experiences to parents/guardians and authorities. Parents/guardians, law enforcement, and those managing the Internet cannot help when these incidents occur if they do not know about them.

10. The Internet remained a fluid environment for youth.

When comparing *YISS-1* and *YISS-2*, changes in experiences and behavior were evident. This is a sign of how much the Internet environment is changing and how norms and behaviors have yet to become fixed. The migration of youth away from chatrooms and into instant messaging and online journal and networking sites is a good example. This poses a challenge to make sure yesterday's remedies are not superseded by tomorrow's realities. But it is also encouraging, because it means opportunities to change behavior and better protect youth are not yet confronting entrenched patterns.

Limitations of the Survey

Every scientific survey has limitations and defects. Readers should keep some of these important things in mind when considering the findings and conclusions of this survey.

- We cannot be certain how candid our respondents were. Although we used widely accepted social science procedures, our interviews involved telephone conversations with young people on a sensitive subject, factors that could contribute to less than complete candor.
- The young people we did not talk to may have been different from the youth we talked to. There were parents and guardians who refused to participate or refused to allow us to talk to their children, and there were youth who refused to participate and those we could never reach. Our results might have been different if we had been able to talk to all these people.
- Our numbers are only estimates, and samples may be unusual. Population sampling is intended to produce groups representing the entire population, but sometimes samples are randomly skewed. For most of our major findings, statistical techniques suggest estimates are within 2.5% or less of the true population percentage in 95 out of 100 samples like this one, but there is a small chance our estimates are farther off than 2.5%.

Recommendations

A number of recommendations seem plausible in light of the findings from the first and second *Youth Internet Safety Surveys*.

1. Expand solicitation prevention messages.

The second *Youth Internet Safety Survey* suggests the proportion of youth Internet users receiving unwanted sexual solicitations has declined, and a smaller proportion of youth seem to be communicating online with people they do not know in person. It is important to continue with the kinds of prevention messages that may be encouraging this safer online behavior.

But we should also think about honing and developing even more effective prevention strategies based on matters such as developing technologies and new approaches used by solicitors, especially those youth knew in person and not just online. *YISS-2* gives us some pointers.

2. While prevention should be aimed at youth of all ages, it should particularly focus on preteens and teens.

While law enforcement does receive reports of younger children being sexually solicited online, none of the 10 year olds and few 11 and 12 year olds in *YISS-2* received such solicitations. The concentration of risk among older youth means online protection requires an approach tailored to adolescents because, when we talk about online sexual solicitations of youth we are mainly talking about youth in middle and high school. We need approaches acknowledging their independence and developmental interests including their natural curiosity about and interest in sex and romance. We cannot rely on simply urging parents and guardians to control, watch, or educate their children, because youth this age are more independent and less supervised than younger youth. We recommend talking directly and frankly with youth, starting in the preteen years. And we should not ignore older youth, ages 16 and 17, who have begun to see themselves as part of the adult world.

3. Focus on adolescent desires for love, romance, and companionship.

In addressing the teens who are vulnerable to sexual solicitations, moreover, it is not sufficient to simply emphasize the dangers of assault, abduction, and rape. Internet exploiters know many teens are susceptible to romantic fantasies, illusions of love, and desires for companionship. Unfortunately exploiters also know how to take advantage of this susceptibility when they form close online relationships with youth (Wolak, et al., 2004). Prevention messages about sexual solicitation need to address this vulnerability. Such messages need to remind teens about how adults who use the Internet to meet and form sexual relationships with young teens are often committing crimes and likely to get themselves and their partners in serious trouble.³⁶ Youth need to understand how some adults "groom" youth to allay anxieties and encourage sexual activity. Moreover youth need to

³⁶ This discussion should not be limited to relationships formed online. Youth need to be alerted about how adult acquaintances they know in person may also use the Internet to promote inappropriate and illegal romantic relationships or set youth up for victimization (Mitchell, Finkelhor, & Wolak, 2005).

hear about how relationships between teens and adults they meet online are doomed to failure and disappointment if not worse, and, despite what teens may be imagining, are usually more about sex than enduring love.

4. Be frank with youth about online sexual activities.

Prevention messages also need to be frank with teens about the potential risks of sexual activities on the Internet including going to X-rated web sites, talking online about sex with people they do not know in person, and engaging in cybersex. Teens need to know more about what is against the law. They also need to learn the ways exposures to sexual material could negatively impact their sexual development and that some people develop compulsions about looking at sexual material (Carnes, 2003; Carnes, 2001).

5. Address youth involvement in the making and transmitting of sexual photographs.

YISS-2 notes a potentially burgeoning trend of people who try to involve youth in sexual photography. We need to publicize the risks of posing for sexual pictures. We need to clearly inform youth that taking sexually explicit photographs of people younger than 18, including taking such photographs of themselves, is a crime under federal laws against producing child pornography.³⁷ We need youth to understand the widespread circulation these images may receive and their permanence and irreversibility once in circulation online. Youth need to understand the risk of being exploited by sexual predators and people who have sexual perversions involving voyeurism and exhibitionism. We need to clearly inform youth that people they know in person and consider to be "real-life" friends as well as people they meet online could try to involve them in this activity (Wolak, Finkelhor, & Mitchell, 2005). We need to extend this education to parents and guardians as well, so they understand the unsuspected and risky uses web cams and digital cameras may be put to and the magnitude of this problem.

More research and testimony is needed from youth who were enticed into creating such sexually explicit photographs (Eichenwald, 2005). As a point of reference, on September 18, 2002, the National Center for Missing & Exploited Children launched an intensive effort to identify child victims exploited through pornographic images circulated online. Through December 31, 2005, the National Center for Missing & Exploited Children's Child Victim Identification Program has reviewed seized images from 4,264 cases of perpetrators arrested for child pornography involving 591 identified victims and reviewed more than 3 million images/movies in an attempt to identify and assist victims and stop the perpetrators who victimize these children.³⁸

6. Use prevention to discourage adolescents from soliciting acquaintances.

YISS-2 identified a growing trend of unwanted sexual solicitations coming from people youth already knew — acquaintances, not just people they only knew online. Thus a solicitor may be someone such as a schoolmate, the friend of a

³⁷ 18 U.S.C. § 2256.

³⁸ NCMEC's *Child Victim Identification Program, Weekly Activity Report #171* (December 26, 2005 – January 1, 2006). Alexandria, Virginia: National Center for Missing & Exploited Children.

friend, or the volunteer who is organizing a school trip. Youth get "hit on" all the time by acquaintances when offline so there is no reason why this would not be happening online. Moreover, solicitations from acquaintances were not less distressing or aggressive than those from people youth did not know in person. This means prevention messages need to be generalized enough to include dangers from this source too, rather than just using a stereotype of the unknown person as the Internet threat.

This study highlights how threats may come from peers. This means some of the youth who are hearing prevention messages are at risk of becoming solicitors themselves. Thus prevention messages also need to be tailored to create awareness about the problem of youth solicitors and constructed to discourage and deter youth who might be inclined to use the Internet to make unwanted sexual advances.

7. Take on the harassment issue in prevention programs.

There are worrying signs in this survey about the increasing numbers of youth experiencing online harassment, including threats and other offensive behavior. That harassment has increased, while the proportion of youth receiving sexual solicitations decreased may reflect the fact we have mobilized to warn about solicitations, but not done much yet about threats and harassment. It may not be too late to decrease threats and harassment too.

We need to do more to head off this trend. We need to describe the harassment problem effectively and in detail so youth, parents/guardians, and other authorities understand and identify it when they see it. We need to make sure existing anti-bullying and other prevention programs include discussions about Internet harassment as part of their content. We need to create and publicize codes of conduct that include Internet behavior and get these codes adopted through Internet service providers, schools, clubs, and organizations as well as on web sites. Then we need to encourage Internet service providers, schools, and other youth-serving organizations to have strong sanctions against Internet harassment. Because much bullying and harassment, both off- and online, occurs in school or arises from events that occur in school, School Resource Officers could be an important component in prevention and intervention programs.

8. Address the group dynamics of Internet use.

Some of the unwanted solicitations, exposure, and harassment happened when youth were using the Internet in groups, and a lot of youth were not alone when they engaged in risky sexual behavior and rudeness and harassment of others. We need to learn more about the dynamics of these situations and address prevention messages to include situations where youth are using the Internet with friends or other peers.

9. Focus on the unwanted part of Internet exposure to sexual material.

YISS-2 found a growing exposure of youth to sexual material they did not want to see. The pornography issue is complicated and controversial. Nonetheless, whatever one's views on restricting voluntary adult access to adult pornography, we think there is a consensus that youth, using a modicum of care, should be able to use the Internet without coming across unwanted sexual material. The

data from YISS-2, however, suggest more youth are exposed to unwanted sexual material (34%) than seek it out voluntarily (13%). We need to explore ways to allow individuals to fight back against unwanted exposure.

This means targeting those who use aggressive and deceptive methods to market sexual material and increasing the legal, financial, or accessibility costs of such marketing practices. Certainly we need to educate youth about the ways sexual material and links to it may be downloaded to their computers without them knowing, so they are more adept at avoiding that material. We also need to prepare youth for what they might run into, so it might be less distressing when they do. Information about this could be made available on web sites educating people about Internet safety, in brochures and pamphlets, and in school-based sexual education programs. We have to make Internet security easier, more built into systems, and less reliant on individual initiative, technological skill, and personal financial resources. We also need to increase the sophistication of youth about protecting the privacy of Internet communications and electronic information since privacy awareness may decrease unwanted exposure to sexual material.

10. Promote reporting.

One of the most discouraging findings in this study is so few youth told authorities such as law enforcement, schools, and Internet service providers about episodes of all types. The proportion of youth who said they knew where to report actually declined. This may be due to a combination of factors — from desensitization about offensive online events to cynicism — or discouragement that anything will be done, not being taught what to do, minimizing the seriousness of what they encounter, or blaming themselves for these incidents.

11. Teach reasons to report.

We need to develop and implement educational programs to motivate youth and their parents and guardians to report. It is too easy in the automated world of cyberspace just to log off and let it go. Youth and parents/guardians need to understand the seriousness of these situations. They need to know when crimes are being committed. They need to think about this as part of a “fight for the neighborhood.” They need to see it as part of their responsibility to other families and the quality of the Internet to file complaints about offensive episodes. It is imperative to instill a sense of civic responsibility among the community of youth Internet users. Simply turning off the computer does not do anything to prevent future incidents other youth may encounter.

12. Increase the number and visibility of reporting options.

People need to know where to report suspicious incidents, where to find law enforcement online, and where to find other administrative authorities who may take action. The CyberTipline is an important resource. It was created by Congressional mandate³⁹ to allow persons to report online and via toll-free telephone the enticement of children for sexual acts including online enticement,

³⁹ 42 U.S.C. § 5773(b)(1)(H).

child sexual molestation not in the family, child pornography, sex tourism of children, and child victims of prostitution.

We need more visible public- and private-reporting options. Of course not all or even most of the offensive incidents youth encounter online qualify as illegal or criminal behavior. Much of the harassment and unwanted exposure to sexual material is not. But as we know from law-enforcement experience with the “broken windows” concept — the idea combating minor disorder and offenses may lead to decreases in more serious crime — there should be options to allow the reporting of offensive but noncriminal behavior. Perhaps these reports should not go to law enforcement, but rather to other authorities in a position to address them such as Internet service providers, chatroom moderators, and school officials. Of course, people also need to be educated so they know when online behavior has crossed the line and become criminal.

13. Enhance reporting mechanisms.

We need to make reporting of all sorts easier and more automatic. For example in some gaming sites there are buttons for reporting mischief. When some E-mail programs crash, windows come up asking users if they want to report the event. These kinds of visible mechanisms need to be there for reporting the offensive online incidents youth are encountering. In addition it would be helpful to see ready mechanisms to log previous transactions leading to a problem, which would be of assistance in tracking online solicitors and harassers. There could, however, be some downsides if these responses brought about a tidal wave of reporting no one could respond to and led to cynicism among reporters. But we may also think about such reporting icons as similar to the crime-watch neighborhood street signs. They are reminders to criminals that people are on the alert.

14. Enhance Internet accountability.

In striving to enhance responsible behavior on the Internet, we should consider ways to build in incentives for enhancing community and prosocial behavior and establishing positive norms. In cyberspace people are not just operating in unclaimed territory. There is organized turf, and there are jurisdictions in cyberspace. The question is, are the administrators of these jurisdictions doing everything they can to promote civility and deter offensive behavior? A good example of a norm-promoting and offense-discouraging system is the one eBay uses. It promotes feedback about sellers and allows buyers and sellers to see the reputation of the person with whom they are dealing. eBay knows they have to create confidence and trust in their territory or people will not use it.

There are not enough of these trust-enhancing systems. Wouldn't it be interesting to know before signing up with an Internet service provider how it compared to other providers in rates of offensive behavior or customer satisfaction for following up on complaints? Wouldn't it be good, before going into a chatroom, to know how many complaints there had been by participants? More online businesses may come to recognize the competitive advantages of helping to ensure safety in and around their environments. A positive step would be for electronic

those most likely to engage in potentially risky Internet activities such as solicitation and sending/posting pictures online, and reasons why youth may hesitate to report online incidents

- Whether and how exposure to sexual materials online is affecting the sexual development of youth, more about the nature of the distress some youth express over unwanted exposure, how technology may be contributing to the problem of unwanted exposure, and how to lessen unwanted exposure
- The impact of different types of prevention messages and strategies

Methodological Details

The second *Youth Internet Safety Survey* was a telephone survey of a national sample of 1,500 youth Internet users, ages 10 to 17, and their parents or guardians. The goal of the survey was to quantify and detail youth experiences with unwanted sexual solicitation, unwanted exposure to sexual material, and harassment on the Internet. The sample was created using random digit dialing to identify eligible households. The research was approved and supervised by the University of New Hampshire Institutional Review Board and conformed to the rules mandated for research projects funded by the U.S. Department of Justice.

Sampling Method

The sample for YISS-2 was drawn from a national sample of households with telephones, which was developed by random digit dialing. Schulman, Ronca, and Bucuvalas, Inc., a national survey research firm, conducted the interviews. Interviewers dialed a total of 54,842 telephone numbers to identify households with children ages 10 through 17 who had used the Internet at least once a month for the past six months. Standardized definitions developed by the American Association for Public Opinion Research (American Association for Public Opinion Research, 2006) were used to code the final dispositions for the telephone numbers used to create the sample. Of the 54,842 numbers, 24,363 were not active residential phone numbers at the time of the interview, including 3,523 business numbers; 2,512 computer/fax numbers; 17,571 other non-working numbers; and 757 other. In addition, 3,626 numbers yielded non-interviewable households because there was no answer including 565 busy on all attempts; 2,986 no answer; and 75 other. Among the 26,853 eligible households that were contacted for household screening, 12,537 did not interview including 6,638 refusals to complete the initial household screener, 3,937 on callback, and 1,962 for other reasons. Among the 14,316 cooperating households 10,360 were not eligible, including 9,616 households with no children in the eligibility age range; 722 households with no or limited Internet access; and 22 households with an incapacitated child.

Initial interviews were conducted in 3,956 households with children ages 10 to 17 who had used the Internet at least once a month for the past 6 months. Among these, families with eligible children refused to complete the survey in 1,839 households including 960 adults completed the initial screener but refused to continue the interview, 829 adults completed the parent portion of the survey but refused to allow their child to be interviewed, and 50 adults completed the parent portion of the survey but their child refused to be interviewed. Eligible children in 617 households did not complete the survey during the field time. Families with eligible children in 1,500 households completed the survey. The sample size of 1,500 was pre-determined based upon a maximum expected sampling error of +/- 2.5% at the 5% significance level.

Data Collection Methods

Upon reaching a household, interviewers asked to speak with an adult and then determined whether there was a child in the household who met the inclusion criteria (age 10 to 17 and used the Internet at least once a month for the past six months). Interviewers then asked to speak with the adult who was most familiar with the youth's Internet use and after receiving informed consent, asked a series of questions about Internet use. At the close of the parent/guardian survey the interviewer asked for permission to interview the child. Interviewers told parents and guardians the youth interview would be confidential, it would include questions about "sexual material your child may have seen," and youth would receive \$10 checks for participating. In households with more than one eligible youth, the one who used the Internet the most often was chosen to participate in the interview. After receiving permission from parents or guardians, interviewers spoke with the youth and asked for permission to conduct an interview. Interviewers assured youth their answers would be confidential and they could skip any question they did not want to answer and end the interview at any time.

The youth interview was scheduled at the convenience of the youth and at a time when he or she was able to talk freely and confidentially. Youth participants were mailed \$10 checks upon completion of the survey. Youth who revealed previously undisclosed sexual or physical abuse or who had thoughts of suicide as determined through answers to questions about mental health were contacted after the interview by a clinical psychologist associated with the study for evaluation and follow-up. The average youth interview lasted 30 minutes, and the average adult interview lasted 10 minutes. Interviewing for YISS-2 took place between March 4, 2005, and June 12, 2005.

Sample

Participants were youth ages 10 to 17 who had used the Internet at least once a month for the past 6 months from a computer at their home, school, a library, or any other place; and one parent or guardian in the household self-identified as the one most knowledgeable about the youth's Internet practices (71% female). This broad definition of Internet use was used to ensure the inclusion of youth respondents who had a range of Internet use, from relatively low to high use. Youth participants ranged from ages 10 to 17 ($M = 14.24$, $SD = 2.09$). Fifty-one (51) percent were girls, and 76% identified as White. Well-educated, prosperous families, and white individuals were over-represented in the YISS-2 sample compared to the national average (U.S. Census Bureau, 2005) but we believe these households reflected the population of youth Internet users at the time of data collection (Lenhart, Madden, & Hitlin, 2005; Cole, et al., 2004).

Response Rates

The American Association for Public Opinion Research has created standardized formulas for response rates of surveys, to help ensure comparable measures are used (American Association for Public Opinion Research, 2006). These standardized formulas were used to determine response rates for YISS-2. Response

rates range from minimum to maximum depending on factors such as how partial interviews and cases of unknown eligibility are calculated. Response rates from YISS-2 ranged from a low of 0.38 to a high of 0.45.

The response rates are reflective of a general decline in response rates for national telephone surveys (Curtin, Presser, & Singer, 2005) which face the challenges of caller ID, confusion with telemarketers, and survey saturation among the public. National telephone surveys continue to obtain representative samples of the public, however, and provide accurate data about the views and experiences of people living in the United States (Pew Research Center, 2004). Our survey was additionally challenged because of its broad inclusion criteria; targeting a more select population likely would have increased the response rate but decreased the generalizability.

Statistical Significance

Differences between YISS-1 and YISS-2 were tested for statistical significance based on the rates of occurrence of specific incidents and experiences within the full samples. The significance tests determined whether apparent increases or decreases in the proportion of youth reporting specific behaviors were reliable, rather than possibly attributable to chance.

Instrumentation

The incidence rates for sexual solicitation, unwanted exposure to sexual material, and harassment were estimated based on a series of screener questions about unwanted experiences while using the Internet in the past year. ("Past year" refers to the year prior to the interview.) Two of the screeners concerned harassment, three involved unwanted exposure to sexual material, three focused on sexual solicitation, and one question asked if anyone online had encouraged the youth to run away from home. (Episodes revealed in response to the screeners were not counted as "incidents" unless they met additional definitional criteria.) More extensive follow-up questions were asked about the unwanted incidents and used to further classify the episodes into the categories discussed in this report.

Follow-up questions were limited to only two incidents because of time constraints. Consequently, some incidents that young people told us about were not the subject of follow-up questions, and these incidents were omitted from incidence rates. If a youth had incidents in more than two categories, runaway incidents were given first priority for follow-up questions, harassment incidents second priority, sexual solicitation incidents third priority, and unwanted exposure incidents fourth priority. If a youth had more than one incident in a particular category, the follow-up questions referred to the "most bothersome" incident or, if none was "most bothersome," the most recent incident. The limits on follow-up questions probably led to some undercounting of incidents, particularly episodes of unwanted exposure to sexual material.

Youth who reported a close online relationship with an adult which had a sexual component were also counted as having a sexual solicitation or approach ($n=0$ in YISS-1 and $n=8$ in YISS-2) in order to capture instances of potentially illegal relationships between youth and older adults. Due to a change in the selection criteria for following-up on a close online relationship, there is the

possibility that youth who met these criteria for sexual solicitation were overcounted in *YISS-2*. Specifically, in *YISS-1*, one close online relationship was chosen for follow-up based on the criteria of (in order of priority) a person met on the Internet you later met in person; had a romantic online relationship with; and had a close online relationship with. Alternately, in *YISS-2* one close online relationship was chosen for follow-up based on the criteria of (in order of priority) an online romance with an adult with a face-to-face meeting; a close online relationship with an adult with a face-to-face meeting; some other relationship with an adult with a face-to-face meeting; an online romance with an adult who wanted a face-to-face meeting; a close online relationship with an adult who wanted a face-to-face meeting; some other online relationship with an adult who wanted a face-to-face meeting; an online romance with an adult without wanting or having a face-to-face meeting; a close online relationship with an adult without wanting or having a face-to-face meeting; a close online relationship with a minor with a face-to-face meeting; some other online relationship with a minor who wanted a face-to-face meeting; any online romance, not with an adult; and any close online relationship, not with an adult. These selection criteria were changed for *YISS-2* in order to try and capture more details about online relationships between youth and adults. This change in criteria for close online relationship follow-ups, however, does not alter the overall findings regarding sexual solicitations since excluding the 8 youth in *YISS-2* who met the criteria for sexual solicitation based on having a sexual relationship with an adult still results in 13% of youth overall revealing sexual solicitations or approaches (n=192).

Screener Questions

1. In the past year, did you ever feel worried or threatened because someone was bothering or harassing you online?
2. In the past year, did anyone ever use the Internet to threaten or embarrass you by posting or sending messages about you for other people to see?
3. In the past year when you were doing an online search or surfing the web, did you ever find yourself in a web site that showed pictures of naked people or of people having sex when **you did not want to be in that kind of site**?
4. In the past year, did you ever receive E-mail or instant messages **that you did not want** with advertisements for or links to X-rated web sites?
 - a. Did you ever **open** a message or a link in a message that showed you actual pictures of naked people or people having sex **that you did not want**?
5. In the past year, when you were online, did you ever find people talking about sex in a place or time when **you did not want this kind of talk**?
6. In the past year, did anyone on the Internet ever try to get you to talk online about sex when you **did not want to**?
7. In the past year, did anyone on the Internet ask you for sexual information about yourself when you did not want to answer such questions? I mean very personal questions, like what your body looks like or sexual things you have done.
8. In the past year, did anyone on the Internet ever ask you to **do** something sexual that you did not want to do?
9. In the past year, did anyone on the Internet ever ask you or encourage you to run away from home?

Note: Episodes reported in response to the screener questions were not counted as incidents unless they met additional definitional criteria.

How Many Youth Had Online Episodes?

Estimations of the Number of Youth Internet Users

We used data gathered by the U.S. Census Bureau (2005) to derive estimates of the prevalence of Internet use by youth ages 10 through 17. This data included the calculation of numbers and ages of children in U.S. households who used the Internet in 2003.⁴⁰ National estimates of Internet use are listed by age in Table 9. The second column of the table gives the percentage of youth in the U.S. in each age group who used the Internet in 2003. The third column gives the estimated numbers of youth Internet users in 2003.

Table 9. National Estimates of Youth Internet Use by Age*

Age	%Youth Internet Users	Estimated # Youth Internet Users+
10	61%	2,430,000
11	66%	2,780,000
12	70%	2,870,000
13	72%	3,190,000
14	75%	3,300,000
15	80%	3,320,000
16	81%	3,380,000
17	79%	3,510,000
Total		24,780,000

* Confidence intervals were not calculated for these figures.

+ Estimates are rounded to the nearest ten thousand.

Estimations of Youth Internet Users With Unwanted Sexual Solicitations, Exposures to Unwanted Sexual Material, and Online Harassment

The sample of youth interviewed in YISS-2 was designed to represent all youth Internet users ages 10 through 17 in the United States. Because of this, it is tempting to try to translate the percentages of youth who reported unwanted sexual solicitations, unwanted exposures, and harassment in this survey into actual numbers or population estimates. For example the 13% of the sample who experienced a sexual solicitation or approach in the past year may be multiplied against the census estimate that 24.78 million youth between the ages of 10 and 17 are Internet users to yield a population number of 3.22 million youth who might have had such an episode.

This precision, however, may be somewhat misleading. Sample surveys have margins of error, which are described in scientific terms as "95% confidence intervals." These confidence intervals express the range of numbers within which

⁴⁰ The U.S. Census Bureau data provides estimates of any Internet use, which is slightly different from our eligibility criterion of Internet use at least once a month for the last 6 months.

the "true" number is likely to fall in 95 out of 100 attempts to estimate it with a sample of this size. So in this sample of 1,500, it is 95% likely that the true number of youth experiencing a sexual solicitation or approach in the past year falls in a range that could be almost half a million youth more or less than our estimate of 3.22 million.

We have provided ranges of estimates for seven of the major episode types in Table 10. Unfortunately in this case the imprecision of such estimates is compounded by the fact the numbers of youth Internet users are **also** estimates with their own margins of error (not calculated for this report). In addition, while these estimates were obtained from an actual census count, they were based on data from 2003, a full year prior to the time frame the youth in this survey were responding about.

Thus, because the parameters needed to make a population estimate have large elements of imprecision and population estimates may take on an aura of exactitude that is sometimes misleading, in this report we have followed the convention with most social-scientific surveys of this size and reported the results primarily in terms of percentages (in this case of youth Internet users). We recommend this approach to other interpreters of this survey.

Estimates of Unwanted Sexual Solicitations Between YISS-1 and YISS-2

There is an additional issue with respect to the decline in the proportion of youth who had unwanted sexual solicitations between the first and second *Youth Internet Safety Survey*. While we can say the proportion of solicited youth Internet users declined, we cannot say with certainty fewer youth were solicited. This is because the proportion of youth in the general population who became Internet users rose at the same time the proportion of solicited youth fell. While the estimate in Table 10 suggests a decrease in the actual number of youth Internet users who were solicited, we do not have a precise estimate of the increase in youth Internet users, so we cannot calculate the exact numerical dimensions of the decline in solicitations in relation to the increase in youth Internet use. For this reason, throughout this report we have referred to a decline in the percent or proportion of youth Internet users solicited, but we have not stated fewer youth were solicited.

**Table 10. Population Estimates and Confidence Intervals for
Online Victimization of Youth***

Online Victimization	% Youth Internet Users	95% Confidence Interval	Estimated # of Youth Internet Users+	95% Confidence Interval
Sexual Solicitations and Approaches				
Any	13%	12%-15%	3,220,000	2,970,000-3,720,000
Distressing	4%	3%-6%	990,000	740,000-1,490,000
Aggressive	4%	3%-5%	990,000	740,000-1,240,000
Unwanted Exposure to Sexual Material				
Any	34%	32%-37%	8,430,000	7,930,000-9,170,000
Distressing	9%	8%-11%	2,230,000	1,980,000-2,730,000
Harassment				
Any	9%	7%-10%	2,230,000	1,730,000-2,480,000
Distressing	3%	2.5%-4%	740,000	620,000-990,000

* Estimates and confidence intervals are based on an estimated number of 24,780,000 Internet users between the ages of 10 and 17.

+ With one exception, estimates and confidence intervals are rounded to the nearest ten thousand.

~ This percent was not rounded so the lower bound of the confidence interval could be shown.

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Internet Safety Resources and Information

The Crimes against Children Research Center has a web site at www.unh.edu/ccrc. This site has descriptions of CCRC research projects and copies of reports and journal articles. Papers using data from surveys about topics related to the Internet are available including copies of papers using data from

- The first *Youth Internet Safety Survey*, available at http://www.unh.edu/ccrc/youth_internet_safety_survey_publications.html
- The *National Juvenile Online Victimization Survey*, available at http://www.unh.edu/ccrc/national_juvenile_online_victimization_publications.html
- The *Survey of Internet Mental Health Issues*, available at <http://www.unh.edu/ccrc/pdf/CV92.pdf>

Papers using data from the second *Youth Internet Safety Survey* will be posted as they become available.

Helpful Internet safety web sites include

- <http://www.isafe.org>
- <http://www.missingkids.com>
- <http://www.NetSmartz.org>
- <http://www.Safekids.com>
- <http://www.Safeteens.com>
- <http://www.webwisekids.org>

If you have information to help in the fight against child sexual exploitation please visit www.cybertipline.com or call 1-800-843-5678.

National Center for Missing & Exploited Children

The National Center for Missing & Exploited Children®, established in 1984 as a private, nonprofit organization, serves as a clearinghouse of information about missing and exploited children; provides technical assistance to the public and law-enforcement agencies; offers training programs to law-enforcement and social-service professionals; distributes photographs of and descriptions about missing children worldwide; creates and coordinates child-protection education and prevention programs and publications; coordinates child-protection efforts with the private sector; networks with nonprofit service providers and state clearinghouses regarding missing-child cases; and provides information about effective legislation to help ensure the protection of children per 42 U.S.C. §§ 5771 *et seq.*; 42 U.S.C. § 11606; and 22 C.F.R. § 94.6.

A 24-hour, toll-free telephone line, **1-800-THE-LOST® (1-800-843-5678)**, is available in Canada and the United States for those who have information regarding missing and exploited children. The “phone free” number is 001-800-843-5678 when dialing from Mexico and 00-800-0843-5678 when dialing from other countries. For a list of other toll-free numbers available when dialing from specific countries visit www.missingkids.com, and from the homepage click on the link to “More Services” and then on the link to “24-Hour Hotline.” The CyberTipline® is available worldwide for online reporting of these crimes at www.cybertipline.com. The TTY line is 1-800-826-7653. The NCMEC business number when dialing in the United States is 703-274-3900. The NCMEC business number when dialing from other countries is 001-703-522-9320. The NCMEC facsimile number is 703-274-2200. The NCMEC web-site address is www.missingkids.com.

For information about the services offered by our other NCMEC offices, please call them directly in California at 714-508-0150, Florida at 561-848-1900, Kansas City at 913-469-5437, New York at 585-242-0900, and South Carolina at 803-254-2326.

A number of publications, addressing various aspects of the missing- and exploited-child issue, are available free of charge in single copies by contacting the



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Crimes against Children Research Center

The Crimes against Children Research Center (CCRC) seeks to combat crimes committed against children by providing high-quality research, statistics, and program evaluation to the public, policymakers, law-enforcement personnel, and other child-welfare practitioners. CCRC maintains a publication list of articles concerning the nature and impact of crimes such as child abduction, homicide, rape, assault, property crimes, and physical and sexual abuse of children written by researchers associated with the CCRC. Current activities funded by the Office of Juvenile Justice and Delinquency Prevention of the U.S. Department of Justice include developing questionnaires to assess juvenile crime victimization, evaluating children's advocacy centers, assessing barriers to greater reporting of crimes committed against children, and studying the incidence of and factors related to child abduction. The CCRC also draws on funding from grants, individual gifts, revenues from publications and programs, and state and federal sources.

The Crimes against Children Research Center was created in 1998 at the University of New Hampshire. It grew out of and expands upon the work of the Family Research Laboratory, which has been devoted to the study of family violence, child victimization, and related topics since 1975. Associated with the CCRC is an internationally recognized group of experts who have published numerous books and articles concerning the incidence and impact of violence committed against children.

More information about CCRC publications and activities is available from the Program Administrator and at www.unh.edu/ccrc.



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Online Victimization of Youth: Five Years Later

Acknowledgments

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